

## EAST Search History

| Ref # | Hits  | Search Query   | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|-------|--|--|------------------|---------|------------------|
| L11   | 10557 | ((438/149,150,151,486,487,517,795) or (257/E21.133,E21.134,E21.324,E21.415,E21.497)).CCLS. | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/11/23 14:05 |
| L12   | 1657  | (257/E21.134).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/11/23 14:05 |
| L13   | 1635  | (257/E21.133).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/11/23 14:06 |
| L14   | 1287  | (257/E21.324).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/11/23 14:06 |
| L15   | 1686  | (257/E21.415).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/11/23 14:06 |
| L16   | 54    | (257/E21.497).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/11/23 14:06 |
| S1    | 1225  | (phase near transition) with amorphous   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR               | ON      | 2007/11/16 13:50 |

## EAST Search History

|    |        |   |   |    |    |                  |
|----|--------|---|---|----|----|------------------|
| S2 | 109520 | (crystalline or polycrystalline or monocrystalline or (single near crystal)) with amorphous | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:50 |
| S3 | 3607   | (cap near (layer or film)) with ((silicon near oxide) or (silicon near nitride) or organic) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:51 |
| S4 | 608837 | (metal or conductive) near (layer or film)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:51 |
| S5 | 58632  | thermal near treatment  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:51 |
| S6 | 489022 | grain   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:51 |
| S7 | 1      | S1 and S2 and S3 and S4 and S5 and S6   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:52 |
| S8 | 10     | S2 and S3 and S4 and S5 and S6  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 14:20 |
| S9 | 22     | S2 and S3 and S4 and S5   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/16 13:52 |

## EAST Search History

|     |        |   |  |    |     |                  |
|-----|--------|---|--|----|-----|------------------|
| S10 | 1031   | S2 and S4 and S5 and S6   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:20 |
| S11 | 2      | ("6475857").PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/11/16 14:21 |
| S12 | 10544  | ((438/149,150,151,486,487,517,795) or (257/E21.133,E21.134,E21.324,E21.415,E21.497)).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/11/16 18:21 |
| S13 | 109520 | (crystalline or polycrystalline or monocrystalline or (single near crystal)) with amorphous | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:22 |
| S14 | 4467   | S12 and S13   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:22 |
| S15 | 474    | S14 and (thermal near treatment)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:22 |
| S16 | 474    | S15 and amorphous   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:23 |
| S17 | 15     | S15 and (phase near transition)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:23 |

## EAST Search History

|     |      |  |  |    |     |                  |
|-----|------|--|--|----|-----|------------------|
| S18 | 1225 | (phase near transition) with amorphous | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:23 |
| S19 | 31   | S18 and S12                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/16 18:24 |
| S20 | 2    | ("6965556").PN.                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/11/19 15:59 |
| S21 | 3    | ("2002042171").PN.                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/11/19 15:59 |
| S22 | 2    | ("20020042171").PN.                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/11/19 16:00 |
| S23 | 4    | ((("6160067") or ("4842837"))).PN.     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/11/20 13:17 |
| S34 | 2    | "2003179251".pn.                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON  | 2007/11/20 13:22 |

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|     |     |   |  |    |    |                  |
|-----|-----|---|--|----|----|------------------|
| S35 | 3   | "2002325706".pn.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON | 2007/11/20 13:24 |
| S42 | 1   | 2003JP-0014193.ap,prai.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON | 2007/11/20 13:38 |
| S46 | 5   | "2004041888".pn.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 14:25 |
| S47 | 312 | ((surface or charge) near (density))<br>same (chromium or Cr)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/20 17:11 |
| S48 | 312 | ((surface or charge) near (density))<br>same (chromium or "Cr") | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/20 17:10 |
| S49 | 40  | S47 and (amorphous)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/20 17:11 |
| S50 | 94  | ((surface or charge) near (density))<br>with (chromium or Cr)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/20 17:11 |

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|     |    |   |  |    |    |                  |
|-----|----|---|--|----|----|------------------|
| S51 | 9  | S50 and (amorphous)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/20 17:11 |
| S52 | 94 | ((surface or charge) near (density))<br>with (chromium or Cr) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/21 16:21 |